

Appl. No. 10/650,210
Reply to Office Action of June 10, 2005

REMARKS

In the June 10, 2005 Office Action, claims 1-16 were rejected and claims 17-20 were deemed objectionable. This Response amends claims 1-3, 6, 11, 12, and 17. After entry of the foregoing amendments, claims 1-20 (including 3 independent claims) remain pending in the application. Reconsideration of the application is respectfully requested in view of the above amendments and the following remarks.

Objected Claims

The Office Action acknowledged that claims 17-20 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant has amended claim 17 into an independent claim that includes the limitations of original independent claim 11, original dependent claim 12, original dependent claim 16, and original dependent claim 17. Therefore, amended claim 17, and claims 18-20, which variously depend from claim 17, are now in allowable form.

§103 Rejections

Claims 1-9 and 11-15 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Irie et al., USPN 6,375,436 (hereinafter "Irie") in view of Mohrmann et al., USPN 6,543,243 (hereinafter "Mohrmann"), and claims 10 and 16 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Irie in view of Mohrmann and further in view of Ieda et al., USPN 6,675,597 (hereinafter "Ieda"). Applicant respectfully traverses these rejections.

As an initial matter, Applicant believes that the Office Action inadvertently rejected claim 15 over the combination of Irie, Mohrmann, and Ieda. Applicant assumes that the Office Action intended to reject claim 16 over this combination of references.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation to modify a reference or to combine the teachings of multiple references. Second, there must be a reasonable expectation of success. Third, the prior art must teach or suggest all of the recited claim limitations. Of course, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. Applicant respectfully submits that the Examiner has not met all of the above criteria.

Appl. No. 10/650,210

Reply to Office Action of June 10, 2005

Independent claims 1 and 11 have been amended to specify that a "back mechanical coupler" is utilized to couple the compressor motor to the compressor. As described in Applicant's specification, a clutch is one example of a "mechanical coupler." The claims recite a "back" mechanical coupler to distinguish it from the "front" mechanical coupler recited in claims 2 and 11, where the front mechanical coupler serves to selectively couple the compressor to the engine during normal engine operation and where the back mechanical coupler serves to selectively couple the compressor to the compressor motor during periods when the engine is temporarily stopped or when the engine RPMs fall below a minimum RPM threshold.

The cited combination of references does not teach or suggest a mechanical coupler or clutch between a compressor motor and the compressor, as recited in Applicant's claims. Irie, the primary reference, is directed to a compressor having an integrated compressor motor. The Irie system uses a common rotating shaft (reference number 11) for the compressor and the compressor motor, along with a clutch for coupling the compressor to the engine. The Irie compressor motor "invariably engages in rotation when the electromagnetic clutch unit" is engaged with the engine [Column 5, Lines 45-50]. In other words, the compressor motor always rotates with the compressor, via the rotating shaft 11. A separate clutch between the compressor and the compressor motor is unnecessary with such an arrangement. Indeed, Irie contains no teaching or suggestion to use a separate clutch or mechanical coupler for the compressor motor.

Mohrmann discloses a compressor system having two independently operable compressors contained in a single housing. Mohrmann, like Irie, contains no teaching or suggestion to use a separate clutch or mechanical coupler for receiving rotational power from a compressor motor. Rather, Mohrmann simply discloses the use of a single, common clutch 60 (shown in FIG. 1 of Mohrmann).

Ieda discloses an air conditioning system that uses an electric powered compressor. Ieda contains no teaching or suggestion to use a clutch or mechanical coupler between the compressor 23 and the electric motor 22 (shown in FIG. 2 of Ieda).

Therefore, the proposed combinations of references do not teach or suggest each and every limitation recited in Applicant's claims. For at least this reason, claims 1-16 are not unpatentable over the cited references.

Appl. No. 10/650,210

Reply to Office Action of June 10, 2005

Moreover, one skilled in the art would not be motivated to combine Irie and Mohrmann as proposed by the Office Action. It is clear that the system disclosed by Mohrmann is specifically intended as an alternative to a system that employs a single compressor. For example, Mohrmann expressly states that the system includes an engine driven compressor and an independent electric motor driven compressor, and that the two compressors are independently operated (see Mohrmann's Abstract). Mohrmann also addresses the shortcomings of systems that employ a single compressor at Column 1, Line 14 to Column 2, Line 9. In this regard, Mohrmann actually teaches away from the proposed combination of references and one skilled in the art would not be motivated to modify the Mohrmann system as suggested by the Office Action. Indeed, if the Mohrmann system were modified to utilize a single compressor, then it would be rendered inoperable for one of its primary functions, namely, the independent control and operation of an engine driven compressor and the independent control and operation of a motor driven compressor. Consequently, Applicant submits that the prior art contains no reasonable suggestion or motivation to combine Mohrmann with Irie as proposed by the Office Action.

For at least the above reasons, claims 1-9 and 11-15 are not unpatentable over Irie in view of Mohrmann. For the same reasons, claims 10 and 16 are not unpatentable over Irie in view of Mohrmann and further in view of Ieda. Accordingly, Applicant respectfully requests withdrawal of the §103 rejections of claims 1-16.

Appl. No. 10/650,210
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Conclusion


In conclusion, for the reasons given above, all claims now presently in the application are believed allowable and such allowance is respectfully requested. Should the Examiner have any questions or wish to further discuss this application, Applicants request that the Examiner contact the undersigned attorney at (480) 385-5060.

If for some reason Applicants have not requested a sufficient extension and/or have not paid a sufficient fee for this response and/or for the extension necessary to prevent abandonment on this application, please consider this as a request for an extension for the required time period and/or authorization to charge Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,

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